IN THE CLAIMS:

Please amend claims 3-10 and 15 as follows:

1. (Withdrawn) A DNA base sequencing method in which pyrophosphate produced upon synthesizing a strand complementary to a template DNA is converted into ATP, which is reacted with ~~luciferine~~ luciferin in the presence of an enzyme such as luciferase, and the complementary strand synthesis is monitored by detecting the resulting chemiluminescence to obtain DNA sequence information, said method being characterized by comprising supplying four kinds of dNTP into the reaction vessel by pressurizing via independent capillaries or narrow grooves which can be in contact with a reaction solution.

2. (Withdrawn) The method according to claim 1, characterized in that each dNTP is supplied in a previously designated order into the reaction vessel by pressurizing each dNTP reservoir in order.

3. (Currently Amended) A system for obtaining [[DNA]] nucleic acid sequence information comprising:

~~at least one~~ a reaction vessel;

a first capillary or groove supplying dATP into the reaction vessel by pressurizing or by a liquid transfer system

a second capillary or groove supplying dGTP into the reaction vessel by pressurizing or by a liquid transfer system;

a third capillary or groove supplying dCTP into the reaction vessel by pressurizing or by a liquid transfer system;

a forth capillary or groove [[means for]] supplying dTTP ~~four different kinds of dNTPs~~ into ~~each~~ the reaction vessel ~~via independent capillaries or grooves~~ by pressurizing or by a liquid transfer system; and

a detector monitoring synthesis of a strand complementary to a template [[DNA]] nucleic acid by detecting chemiluminescence which arises from reaction with ATP and luciferin in the presence of luciferase at the reaction vessel the ATP being converted from pyrophosphate produced from the synthesis which uses one of the dATP, the dGTP, the

dCTP and the dTTP ~~different kinds of dNTPs~~,

wherein the template nucleic acid is set in the reaction vessel ~~each of the capillaries or the grooves corresponds to one of said different kinds of dNTPs~~.

4. (Currently Amended) The system according to claim 3, wherein the reaction vessel and the first, second, third and fourth capillaries or [[the]] grooves are incorporated into one module.

5. (Currently Amended) The system according to claim 3, wherein the first, second, third and fourth capillaries or [[the]] grooves are introduced into a top of the reaction vessel

6. (Currently Amended) The system according to claim 3, further comprising dNTP reservoirs each containing one of the dATP, the dGTP, the dCTP and the dTTP ~~different kinds of dNTPs~~ and being pressure-controlled to supply one [[kind]] of [[dNTP]] the dATP, the dGTP, the dCTP and the dTTP contained therein intermittently and repeatedly into the reaction vessel, and an apparatus for controlling electric field between each of the dNTP reservoirs and the reaction vessel.

7. (Currently Amended) The system according to claim 3, wherein each of the first, second, third and fourth capillaries or [[the]] grooves has an inner diameter of less than 0.2 mm or a cross-section area less than 0.04 mm^2, at an inlet of the reaction vessel.

8. (Currently Amended) The system according to claim 3, wherein each of the first, second, third and fourth capillaries or [[the]] grooves has an inner diameter of less than 0.1 mm or a cross-section area less than 0.01 mm^2, at an inlet of the reaction vessel.

9. (Currently Amended) The system according to claim 7, further comprising reagent reservoirs, and reaction solutions each containing one [[kind]] of [[dNTP]] the dATP, the dGTP, the dCTP and the dTTP being introduced from the reagent reservoirs into the reaction vessel via the first, second, third and fourth capillaries or [[the]] grooves connected at bottom of the reaction vessel.

10. (Currently Amended) The system according to claim 7, further comprising a supply unit

set on top of the reaction vessel for supplying reaction solutions containing one of the dATP, the dGTP, the dCTP and the dTTP [[dNTPs]] to the reaction vessel and a reaction vessel unit including the reaction vessel, the supply unit and the reaction vessel unit are separable, and the reaction solutions are alternatively and repeatedly supplied from the supply unit via the first, second, third and fourth capillaries or [[the]] grooves.

11. (Withdrawn) A DNA sequencing method in which pyrophosphate produced upon synthesizing a strand complementary to a template DNA is converted into ATP which is reacted with ~~luciferine~~ luciferin in the presence of an enzyme such as luciferase and the complementary strand synthesis is monitored by detecting the resulting chemiluminescence to obtain DNA sequence information,

said method being characterized in that a primer which sets a starting point of the complementary strand synthesis is immobilized onto a solid surface, pyrophosphate produced upon synthesizing DNA complementary strand which is hybridized with the primer is converted into ATP which is reacted with ~~luciferine~~ luciferin by luciferase or the like, and the DNA base sequence is monitored by detecting the resulting chemiluminescence.

12. (Withdrawn) The method according to claim 11, characterized in that different kinds of primers which hybridize with the target DNA are immobilized onto different solid surfaces or different cells having sectioned solid surfaces, the designated reaction is carried out using dNTP after hybridization with the target DNA, and chemiluminescence resulting from the complementary strand synthesizing reaction caused by different primers is distinguished to monitor the sequence.

13. (Withdrawn) The method according to claim 11, characterized in that the primers are independently immobilized onto the surface of beads which are spatially separated according to the kind of primer.

14. (Withdrawn) The method according to claim 11, characterized in that the solids with the immobilized primers on their surface are held in cells which are spatially separated

according to the kind of primer.

15. (Currently Amended) A [[DNA]] nucleic acid analyzing system comprising:

~~at least one~~ a reaction vessel;

a first capillary or groove supplying dATP into the reaction vessel by pressurizing or by a liquid transfer system

a second capillary or groove supplying dGTP into the reaction vessel by pressurizing or by a liquid transfer system;

a third capillary or groove supplying dCTP into the reaction vessel by pressurizing or by a liquid transfer system;

a forth capillary or groove [[means for]] supplying dTTP ~~four different kinds of dNTPs~~ into ~~each~~ the reaction vessel ~~via independent capillaries or grooves~~ by pressurizing or by a liquid transfer system; and

a detector monitoring synthesis of a strand complementary to a template [[DNA]] nucleic acid by detecting chemiluminescence which arises from reaction with ATP and luciferin in the presence of luciferase at the reaction vessel the ATP being converted from pyrophosphate produced from the synthesis which uses one of the dATP, the dGTP, the dCTP and the dTTP ~~different kinds of dNTPs~~,

wherein the template nucleic acid is set in the reaction vessel ~~each of the capillaries or the grooves corresponds to one of said different kinds of dNTPs~~.

16. (Previously Presented) The DNA analyzing' system according to claim 15, wherein the detector is capable of distinguishing at least two positions emitting the chemiluminescence.

17. (Previously Presented) The DNA analyzing system according to claim 15, wherein the detector is an area sensor.

18. (Previously Presented) The DNA analyzing system according to claim 15, wherein the reaction vessel is selectively shifted relative to the detecting device.

19. (Cancelled)

20. (Previously Presented) The DNA analyzing system according to claim 15, wherein the reaction solutions are supplied substantially simultaneously and independently to the reaction vessel by an ink-jet method.

21 (Previously Presented) The DNA analyzing system according to claim 18, wherein the detector is a photon multiplier tube or an avalanche photodiode.

22-23. (Cancelled)

24. (Withdrawn)A DNA base sequencing system, characterized by comprising a reaction vessel, reagent reservoirs each holding any one of four kinds of dNTP, means to supply dNTP into the reaction vessel at least partly consisting of a capillary or a narrow groove, pressurizing means to control the supply of the reagents, means to detect chemiluminescence emitted from the reaction vessel, and means to analyze data to obtain DNA sequence information by processing the detected data.

25. (Withdrawn)The method according to claim 1, wherein the same kind of dNTP is added twice to assure that the reaction proceeds thoroughly.

26. (Withdrawn)The system according to claim 1, wherein the same kind of dNTP is added twice to assure that the reaction proceeds thoroughly.